WHAT MAKES FOR A "GOOD" SUPERVISOR?

The tough challenges faced by most PhD students are rarely discussed. Even less attention is paid to the often-overlooked role of their supervisor in this process.

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newly admitted doctoral student is often simply thrown in at the deep end, facing a whole new environment, unfamiliar faces, and a multitude of challenges. More often than not, they feel ill-equipped and insufficiently supported by their supervisor - the person who is ostensibly their closest ally. This, in turn, affects the overall experience and success of their academic path. But is this primarily due to a flawed system, the supervisor's attitude, or perhaps the student's own approach? The truth likely lies somewhere in between.

First, while the existing system is far from perfect, it should ideally support both PhD students and their supervisors in making the educational process more effective. But what form should such support take, if it is to be truly helpful? At one of the world's leading universities, for instance, PhD supervisors are required to attend regular, mandatory workshops. At these sessions, world-renowned professors are "taught" how to collaborate effectively with students. Half of the workshops focus on reducing stress for PhD students, systematically addressing their needs, and helping them overcome challenges. At one such session, a professor asked the workshop leader how many doctoral students they had supervised. The answer - "none" - surprised no one. The same professor concluded the session with the remark: "Back in my day, PhD students sometimes left universities in straitjackets. Nowadays, they're coddled like children."

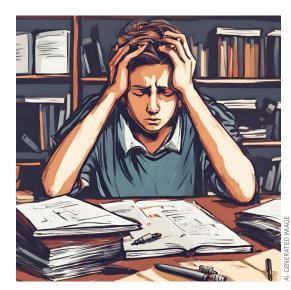
Second, taking a passive approach - merely tossing a life preserver to struggling students - can be an even worse strategy. Left to drift alone for years in a doctoral program, students often lose their passion

for research and gradually sink to the bottom. Learning to navigate the academic world requires significant, active engagement on the part of the supervisor - something many faculty members are unprepared to provide. Why is that? Likely because they themselves lacked such support from their own mentors and don't really have any models to emulate. Yet guiding young scientists at the start of their academic careers can make a profound difference, paving the way for success in later stages of their development. The more time invested in a graduate student, the greater the long-term returns.

Lastly, certain fundamental questions still remain open: Is it necessarily true that everyone can "learn to swim"? Should everyone be expected to? Do new PhD students fully understand the commitment they're making when entering the academic world?

A carrot, not a stick

What qualities should an ideal supervisor have to effectively support the development of young research-





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ers? One key trait is the ability to identify a student's strengths early on in their journey. Expecting a natural-born "theorist" to be good at experimental tasks – or vice versa – will generally be counterproductive. The metaphor of swimming proves useful again: not everyone needs to compete at freestyle if they are naturally better suited to the breaststroke or backstroke. Similarly, when a supervisor accurately assesses a student's potential and tailors tasks to their abilities, the latter can acquire key skills more quickly.

Once when I was at a conference, students from Canada asked me how I punish my PhD students. They were surprised when I replied: "I don't – I reward them." Why would I *punish* them? When a student makes mistakes, it's usually due to a lack of clear guidance from the supervisor. If the supervisor cannot clearly communicate their expectations, how is a student supposed to meet the goals? Unfortunately, some graduate students are often given menial tasks to perform, with supervisors only knowing how to apply the "carrot and stick" method to steer them in the desired direction.

Does early academic independence lead to success? Not necessarily. A PhD student who struggles initially may go on to achieve significant success later, if they receive the right support from their supervisor. Conversely, if a student demonstrates independence from the start, it's wise to give them the freedom to take the lead, while offering occasional guidance to accelerate their progress. But what if a student has enthusiasm but lacks direction? In that case, setting clear milestones at each stage can help them gain confidence on their career path.

Supervisor support is most crucial when the student feels lost. It's important to remember that not every road is necessarily an uphill climb – sometimes, all that's needed is a nudge in the right direction and a helping hand.

Striking a balance

Something one of my professors once said to me as a graduate student has always stuck with me: "If you can explain complex ideas clearly, it means you truly understand them. And if you can present them brilliantly, captivating your audience, then you're truly cut out to be a scientist."

Unfortunately, a student with extensive knowledge but no ability to convey it in an engaging way should not be sent off to present a conference. Period. Success belongs to those who can inspire others with simple ideas. But does one need to be a true scientific showman to be able to competently present at conferences? Again, not necessarily, although students who are open and willing to engage with others often find it easier to overcome the fear of public speaking. As with swimming, it all comes down to practice. One of my graduate students, preparing for her first presentation at an international conference in the UK, was overwhelmed with stress. She was worried about her ability to speak English, to handle tough questions, to avoid freezing up mid-presentation. How did we conquer her nerves? Two practice sessions per day in front of her supervisor, Monday through Friday, for almost two months. The result? The best presentation of the session. This success then boosted her confidence during her thesis defense – she passed with top marks, earning a nomination for the rector's award.

The takeaway? Thoughtful support from the supervisor pays off, often many times over.

Academic culture

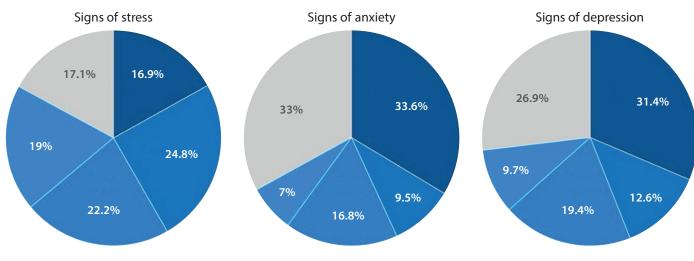
On the other hand, PhD students must understand that how they spend their time during their doctoral studies is ultimately up to them. If a supervisor provides the necessary tools, the student must ensure they don't waste time. Within the broader scope of an academic career, a PhD program is a brief period during which the student should focus on acquiring the skills needed to become independent.

How can this time be used most effectively? The unofficial motto of the U.S. Marines – "Improvise, adapt, overcome" – serves as a fitting mantra for PhD students. The first year is a time for reconnaissance: exploring the academic landscape and crafting a strategy. The second year is for adaptation: refining objectives, developing innovative solutions, and engaging in intensive research. The third year is about breaking through barriers, leading to a successful defense. The supervisor's role as the "drill sergeant" is crucial. Drawing on their experience, they should guide the student's efforts towards an appropriate "frontline" in academia. Without a wise leader, it is hard for a soldier to win a battle.

Approaches to the supervisor–student relationship differ from country to country, significant impacting students' satisfaction and performance. For example, a Dutch study involving 839 graduate students found that the quality of the supervisor–student relationship, a sense of belonging, autonomy in the project, an alignment with the supervisor's research interests all play a key role in boosting PhD students' satisfaction and productivity.

In France, a large study analyzing 77,143 PhD students in 2010–2014 found that the supervisors of the most successful students were most typically a productive but relatively young female supervisor in mid-career, supported by a national grant. Meanwhile, a Finnish study found that the more support students receive from their academic environment and supervisor, the higher their level of engagement. Belgian research involving 411 male and 514 female PhD stu-

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-DOTYCZACEGO-

AKADEMICKIE/WYNIKI-BADANIA-

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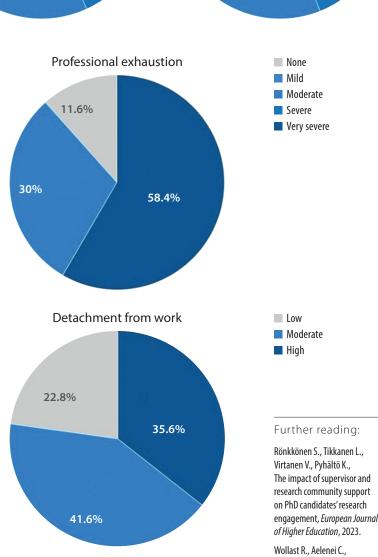
Various Aspects of the Emotional and Mental State of Polish Doctoral Students

dents revealed that women tend to experience more negative emotions (such as stress, discouragement, and sadness) and fewer positive ones (like optimism and satisfaction) than men. Emotional and academic support from supervisors significantly improves well-being and the desire to continue doctoral studies for both men and women. A Swedish study, in turn, found that a good supervisor is not only a source of academic guidance but also part of an emotional support system. Unfortunately, many issues with completing doctoral dissertations stem from supervisors' inadequate approaches.

A demanding role

In Poland, the situation is no better. The PhD Mental Health project undertaken by National Representation of Doctoral Students in Poland found that 67% of PhD students reported experiencing excessive anxiety, while 73% show symptoms of depression - with nearly one-third suffering from severe cases. Burnout, exhaustion, and detachment from work are common, driven primarily by the pressure to publish extensively in prestigious journals, which leads to overwork, stress, and insomnia. The association's conclusion? One of the most critical factors in preventing stress and burnout is a strong, positive relationship with the supervisor, with support from the research team and the institution hosting the doctoral program also playing a vital role.

The role of a PhD supervisor is exceptionally demanding, requiring both academic expertise and emotional intelligence. Before stepping into this role, it's essential to consider whether one is prepared to provide the level of commitment it entails - not just intellectually, but also as a mentor and guide. Research consistently shows that effective supervision goes beyond academic advice. It involves creating an environment where students do feel supported and valued,



but also not micromanaged or treated like children. By addressing systemic issues, offering personalized guidance, and fostering a relationship of mutual respect and trust, supervisors can empower young researchers to navigate challenges, build confidence, and ultimately succeed in the world of science.

engagement, European Journal

Chevalère J., van der Linden N., Galand B., Azzi A., Frenay M., Klein O., Facing the dropout crisis among PhD candidates: the role of supervisor support in emotional well-being and intended doctoral persistence among men and women, Studies in Higher Education, 2023.